United States Environmental Protection Agency
Region I - EPA New England
5 Post Office Square
Boston, MA 02109-3912

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Subj: Inspection Report
Sunoco Logistics Partners L.P.

From: George Harding

Thru: Doug Koopman

To: File

I. Facility Information

A. *Facility Name:* Sunoco Logistics Partners L.P.

B. *Facility Location*: 467 Chelsea Street
East Boston, MA 02128

C. *Facility Contacts:* Peter St. Germaine, Terminal Manager
617-568-2239, pjstgermaine@sunocologistics.com

D. *NPDES ID Number:* MA0004006

II. Background Information

A. *Date and time of inspection:*
Facility entrance: September 15, 2014
Facility exit: September 15, 2014

B. *Weather Conditions:* 58^{0}F. sunny

C. *US EPA Representative(s):* George Harding

D. *Federally Enforceable Requirements Covered During the Inspection:*
NPDES Permit No. MA0004006, issued by EPA Region 1 on August 14, 2006. The permit addresses treated groundwater and stormwater discharges, and includes a requirement to develop and implement a BMP plan.

III. Type and Purpose of Inspection

Compliance evaluation inspection (CEI). Coverage inspection.

IV. Facility Description

Sunoco Logistics Partners owns and operates a petroleum storage and distribution terminal located on the south side of Chelsea Creek in East Boston, MA. The terminal includes a marine unloading facility on Chelsea Creek, large above-ground storage tanks, and a partially covered truck loading rack. All the above-ground tanks are situated within secondary containment dikes. The loading rack and the surrounding paved area are surrounded by a berm and sloped so any stormwater or spills flow to a collection tank for off-site disposal. Gasoline, low-sulfur diesel and jet fuel arrive by tanker or barge at the unloading facility (ethanol and some fuel additives arrive at the facility by truck). Product is stored in large above-ground storage tanks. Gasoline and diesel fuel are loaded on trucks for delivery; jet fuel goes by underground pipeline to Logan Airport. An aerial view of the site is attached.

The terminal has two NPDES regulated discharge points. Outfall 001 discharges treated stormwater, hydrostatic test water, and treated groundwater to Chelsea Creek. Stormwater collects in the containment areas around the above-ground storage tanks. After a storm operators remove any visible sheen from each of the containment areas manually activated pumps transfer the collected stormwater to two interconnected above-ground holding tanks (one is 1,025,000 gallons, the other 500,000 gallons). Stormwater from the roof of the loading rack also goes to the holding tanks. The holding tanks provide flow equalization, and act as oil-water (O/W) separators and settling tanks. Product that floats to the surface is removed with floating suction units as needed. Solids are removed when the tanks are periodically drained for inspection. The underflow is pumped to a 600 gpm O/W separator; actual flow is kept below the design flow. The separator contains a coalescer and crossflow plate pack to separate and collect any oil that make it through the holding tanks. The underflow goes through multi-media filters to remove suspended solids, followed by two granulated activated carbon (GAC) filters operated in series before discharge. Backwash from the multi-media filters goes to a holding tank (either a small tank in the treatment building or back to the large holding tanks).

Outfall 002 is an internal outfall from a groundwater treatment system. A network of wells depresses the groundwater table discharges treated groundwater from the area of the loading racks into a trailer mounted treatment system including an O/W separator, frac tank, bag filters, GAC filters, and cyanide removal filters. The effluent limits apply at the end of the treatment system. The treated groundwater is pumped to the holding tanks and goes through the Outfall 001 treatment system.

V. Inspection

Upon arrival I was met by Peter St. Germaine, the Terminal Manger, and Glen Gronroos, the Assistant Terminal Manager. I presented my credentials.

We were joined for the inspection by Jim Dick of Roux Associates. The Outfall 002 groundwater treatment system is operated for the facility by Roux, which also does the compliance sampling and provides other engineering services for the facility.

At the time of the inspection the groundwater treatment system was not in operation. The system has not discharged since July 2013. According to Mr. Dick MassDEP is in the process of revising its site cleanup regulations, which may remove the requirement for additional remediation. The facility is not pumping additional groundwater until the revised requirements are determined. The treatment system is still on site and fully operational.

The truck loading rack is located at the southwestern portion of the facility north of Chelsea Street. The racks are under a roof, but otherwise open to the weather. Drainage from the roof is pumped to the holding tanks. The loading area is bermed, and slopes gently to the northeast. Stormwater from the area flows to a sump from which it is pumped to a storage tank. This stormwater, along with tank bottoms, is hauled off-site for treatment. The area appeared to be clean, with no visible evidence of fuel on the ground.

We proceeded to the marine unloading facility. Tankers and barges delivering product connect to hoses to transfer it to the storage tanks. There were no vessels docked at the time of the inspection. The dock has a drip pan under the hoses to catch any drips or spills. There was no visible residue in the pan. Stormwater from the area is pumped to the holding tanks for eventual treatment.

The stormwater treatment system is located in a building adjacent to the unloading facility. Although the terminal is staffed 24 hours a day, seven days a week, the treatment system only operates a single shift Monday-Friday as needed, and only when a licensed wastewater operator is available. There is an O&M manual for the treatment system dated 3/27/14. Flow from the holding tanks is pumped to the O/W separator. The unit is rated at 600 gpm, but the feed flow is kept well below that. The feed pumps have a rated capacity of 430 gpm, and an orifice plate restrictor in the feed line reduces the feed flow further. The separator is fitted with a coalescer to bring fine oil particles to clump together, and a crossflow plate pack to separate the oil from the water. It appeared to be well maintained and operating properly. Effluent from the separator then goes through a multi-media filter. There are 6 filter units operated in parallel. Head loss across the filter is used to determine when to backwash the filters. The backwash goes to either a 10,000 gallon tank located in the treatment building or a larger converted fuel storage tank. Effluent from the multi-media filters goes through two 20,000 pound GAC filters operated in series before discharge to Chelsea Creek. Samples are taken between the filters to determine whether breakthrough has occurred. When it does, carbon in the

first filter is replaced, and flow is reversed so the second filter becomes the lead filter. The treatment facility appeared to be well maintained and operating properly.

We next observed a sample of the containment areas. The area inside the dikes is unpaved, and covered with crushed stone, so a portion of the precipitation percolates into the ground. The area slopes toward a sump at the edge of the dike from which accumulated stormwater is pumped to the holding tanks. There was no accumulated stormwater visible at the time of the inspection. The crushed stone had some iron staining, but there was no visible evidence of petroleum.

Discharge monitoring reports (DMRs) from early 2014 were spot checked. Sampling was done by Roux Associates. Sample analysis was done by Geolabs of Braintree, MA in January, and Accutest NE in February and March. Toxicity testing was done by Environ. There were chain-of-custody forms for each of the samples. The results on the DMR matched the results reported by the labs.

As required by the NPDES permit, the facility has a Best Management Practices/ Stormwater Pollution Prevention Plan. The most recent revision is dated 5/15/12. The plan appeared to include the items required by the NPDES permit.


Outfall 001
Treatment
Building
Groundwater
Treatment
Outfall 002
Loading Rack